

## ***Streptococcus pneumoniae*, Invasive (Pneumococcal Disease)**

*Disease Fact Sheet Series*

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### **What is invasive *Streptococcal pneumoniae* infection (Pneumococcal Disease)?**

*Streptococcus pneumoniae* is a bacterium commonly found in the nose and throat. The bacterium can sometimes cause severe illness in children, the elderly and other people with weakened immune systems. *Streptococcus pneumoniae* is the most common cause of ear infections (otitis media), sepsis (blood infection) in children as well as pneumonia in immunocompromised individuals and the elderly.

*Streptococcus pneumoniae* is considered “**invasive**” when it is found in the blood, spinal fluid or other normally sterile sites.

### **How does a person get invasive *Streptococcus pneumoniae*?**

Many people carry the bacteria in their upper respiratory system without becoming ill. *Streptococcus pneumoniae* is spread from person to person by the inhalation of respiratory droplets (e.g. coughing, sneezing) from an infected person. It is not known why certain individuals develop invasive *Streptococcus pneumoniae* disease while others do not.

### **How is *Streptococcus pneumoniae* diagnosed and treated?**

Invasive *Streptococcus pneumoniae* is diagnosed when the bacterium is grown from cultures of sterile body fluids, such as the blood or spinal fluid. *Streptococcus pneumoniae* can cause different symptoms depending on the part of the body it infects. Invasive *Streptococcus pneumoniae* can cause blood infections and meningitis (inflammation of the lining of the brain).

Invasive *Streptococcus pneumoniae* infections are treated with antibiotics. There is an increasing problem of *Streptococcus pneumoniae* bacteria developing drug resistance due to the overuse and misuse of antibiotics.

### **Can invasive *Streptococcus pneumoniae* disease be prevented?**

There is a “pneumococcal” vaccine that can help to prevent invasive *Streptococcus pneumoniae* infections. The vaccine is currently recommended for people that are immunocompromised, or over the age of 65. Recently the vaccine was also approved for use in children under two years of age.

The best way to prevent the spread of the bacteria is by covering your mouth when coughing or sneezing, as well as frequent and thorough handwashing.